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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,577	10/23/2000	Manuel Ferreria	NOMI 0127 PUS	3475

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EXAMINER

ALAM, UZMA

ART UNIT PAPER NUMBER

2157

DATE MAILED: 05/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/694,577

Applicant(s)

FERRERIA ET AL.

Examiner

Uzma Alam

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

This action is responsive to the application filed on October 23, 2000. Claims 1-46 are pending. Claims 1-46 represent a method and apparatus for providing connectivity for a device to a foreign network from a home network without reconfiguring the device.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 37-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 37-40 recite the limitation "configuration manager" in claims 28 and 35. There is insufficient antecedent basis for this limitation in the claim.

Claim 39 recites the limitation "configuration manager of claim 28." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

Claims 1, 2, 5-10, 14-16, 19-24, 28-30, 33-38, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redlich US Patent No. 6,591,306 in view of Rai et al. US Patent No. 6,675,208. Redlich discloses the invention substantially as claimed including network access for portable devices (see abstract). Rai discloses the invention substantially as claimed including a registration scheme for a network (see abstract).

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As per claims 1, 15, and 29 Redlich discloses a method, apparatus and configuration adapter for providing connectivity to a foreign network for a device configured for communication over a home network without reconfiguring the device the method, apparatus and configuration adapter comprising:

intercepting packets transmitted by the device (intercepting packets; column 1, lines 16-27; column 5, lines 39-67; column 6, lines 1-27; column 17, lines 31-64);

selectively modifying intercepted packets which are incompatible with the foreign network to be compatible with network settings of the foreign network (modifying the intercepted packets; column 17, lines 14-39); and

selectively providing network services for the device corresponding to network services available on the home network (providing network services, such as ARP; column 17, lines 49-64; column 18, lines 6-41)

Redlich does not expressly disclose to reduce delay associated with accessing the network services from the foreign network, or to provide network services otherwise inaccessible from foreign network. Rai et al discloses accessing the network services from a foreign network. See column 6, lines 40-67; column 7, lines 36-65; column 16, lines 15-65). It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the selectively providing network services for a device on the foreign network from the home network of Redlich with the accessing the network services from the foreign network. A person of ordinary skill in the art would have been motivated to do this to reduce the need of relaying data over long distances (Rai; column 16, lines 13-15).

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As per claims 2, 16, and 30 Redlich and Rai disclose the method, apparatus and configuration adapter of claims 1, 15, and 29 wherein selectively providing network services comprises providing a proxy service (Redlich, providing proxy services; column 17, lines 49-64)

As per claims 5, 19, and 33, Redlich and Rai disclose the method, apparatus and configuration adapter of claims 2, 16, and 30 wherein providing a proxy service comprises resolving a domain name to an address (Redlich; using ARP to resolve a domain name to an address; column 6, lines 54-67; column 7, lines 45-67; column 18, lines 6-41).

As per claims 6, 20, and 34, Redlich and Rai disclose the method, apparatus and configuration adapter of claims 5, 19 and 33 wherein resolving a domain name to an address comprises:

attempting to resolve the domain name to an address using a domain name server accessible from the foreign network (Redlich; resolving the domain name from the foreign server; column 11, lines 40-57); and

resolving the domain name to an address corresponding to a configuration adapter after a predetermined timeout period expires, or if the domain name servers accessible from the foreign network can not resolve the domain name (Redlich; resolving the domain name to the HW address if the wait period expires). See also Figures 17 and 20.

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As per claims 7, 21, and 35, Redlich and Rai disclose the method, apparatus and configuration adapter of claims 5, 19, and 33 wherein resolving a domain name to an address comprises:

establishing a connection between the device and a configuration adapter (Redlich; column 17, lines 14-19);

examining contents of the intercepted packets to identify a domain name (Redlich; column 18, lines 57-67; column 19, lines 1-16);

resolving the domain name to an address (Redlich; column 19, lines 16-30);

establishing a connection between the configuration adapter and a computer at the address corresponding to the domain name (Redlich; column 19, lines 16-30); and

splicing the connections between the device and the configuration adapter and between the configuration adapter and the computer, to form a single connection between the device and the computer (Redlich; directly connecting the device and the computer at the address corresponding to the domain name; column 20, lines 1-21).

As per claims 8, 22, and 36, Redlich discloses the method, apparatus and configuration adapter of claims 7, 21, and 35 wherein splicing the connections comprises directly modifying subsequently intercepted packets without copying the packet payload (Redlich; column 16, lines 29-34).

As per claims 9, 28, and 37, Redlich and Rai disclose the method, apparatus and configuration adapter of claims 7, 21, and 35 wherein resolving the domain name to an address

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comprises using a domain name server accessible from the foreign network (Redlich; column 19, lines 16-67; column 20, lines 66-67; column 21, lines 1-20).

As per claims 10, 24, and 38, Redlich and Rai disclose the method, apparatus and configuration adapter of claims 7, 21, and 35 wherein resolving the domain name to an address comprises:

resolving the domain name to an address using a domain name server (Redlich; column 18, lines 56-67; column 19, lines 1-15);

attempting to establish a connection with a computer at the address corresponding to the domain name (Redlich; column 19, lines 1-15);

resolving the domain name to an address corresponding responding try the configuration adapter after expiration of a predetermined timeout period wherein the step of splicing is performed after receiving a delayed response from the computer at the address corresponding to domain name (Redlich; column 19, lines 31-67; column 20, lines 1-20).

As per claims 14, and 28 Redlich and Rai disclose the method and apparatus of claims 1 and 15 wherein selectively providing network services comprises redirecting domain name service requests to a local domain name server for the foreign network (Redlich; column 20, lines 21-36).

As per claim 43 Redlich discloses a method for providing access to a second local area network for providing access to a second local area network for a device configured to

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communicate over a first local area network having incompatible network settings, the method comprising:

determining whether an application running on the device is requesting a proxy service (column 1, lines 16-27; column 5, lines 39-67; column 6, lines 1-27; column 17, lines 14-64). Redlich does not expressly disclose modifying packets containing proxy requests to direct requests if the requested proxy service is inaccessible from the foreign network. Rai discloses modifying the packets to direct requests to the home network if the requested proxy service is inaccessible from the foreign network. See column 6, lines 40-67; column 7, lines 36-65; column 16, lines 15-65). It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the selectively providing network services for a device on the foreign network from the home network of Redlich with the accessing the network services from the foreign network. A person of ordinary skill in the art would have been motivated to do this to reduce the need of relaying data over long distances (Rai; column 16, lines 13-15).

As per claim 44, Redlich and Rai disclose the method of claim 43 wherein the step of determining comprises establishing a transmission control protocol (TCP) connection between a configuration adapter and the device to examine contents of packets transmitted by the device (Redlich; column 19, lines 16-30).

As per claim 45, Redlich and Rai disclose the method of claim 44 wherein the step of determining further comprises:

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establishing a TCP connection between the configuration adapter and the proxy server requested by the application (Redlich; column 19, lines 16-30; column 20, lines 1-20); and splicing the connections such that end-to-end semantics are maintained by the application and the requested proxy server (Redlich; column 19, lines 31-67; column 20, lines 1-21).

As per claim 46, Redlich and Rai disclose the method of claim 44. Redlich does not expressly disclose wherein the step of splicing comprises:

implementing a subset of network protocol functionality to intercept each packet from the application without passing the packet through an RFC-compliant protocol stack. Rai discloses implementing a subset of network protocol functionality to intercept each packet without passing the packet through an RFC-compliant protocol stack. See column 21, lines 38-67; column 22, lines 1-7. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the intercepting packets of Redlich with not passing the packet through an RFC compliant protocol stack of Rai. A person of ordinary skill in the art would have been motivated to do this to reduce cost and risk associated with RFC compliant stacks.

Claims 3, 4, 11, 17, 18, 31, 32, 39, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redlich US Patent No. 6,591,306 in view of Rai et al. US Patent No. 6,675,208 as applied to claims 1, 2, 5-10, 14-16, 19-24, 28-30, 33-38, and 43-46 above, and further in view of Yeomans et al. US Patent No. 6,134,680.

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As per claims 3, 17, and 31, Redlich and Rai disclose method, apparatus and configuration adapter of claims 2, 16, and 30. Redlich and Rai do not expressly disclose wherein the proxy service comprises hypertext transfer protocol proxy service. Yeomans discloses a HTTP service. See column 4, lines 8-34. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the proxy service of Redlich and Rai with the HTTP proxy service of Yeomans. A person of ordinary skill in the art would have been motivated to do this to enable performance improvements.

As per claims 4, 18, and 32, Redlich and Rai disclose the method, apparatus and configuration adapter of claims 2, 16, and 30. Redlich and Rai do not expressly disclose wherein the proxy service comprises file transfer protocol proxy service. Yeomans discloses a FTP service. See column 4, lines 8-34. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the proxy service of Redlich and Rai with the FTP proxy service of Yeomans. A person of ordinary skill in the art would have been motivated to do this to enable performance improvements.

As per claims 11, 25, and 39, Redlich and Rai disclose the method, apparatus and configuration adapter of claims 1, 15, and 28. Redlich and Rai do not expressly disclose wherein the proxy service comprises an outgoing email service. Yeomans discloses an outgoing email service. See column 4, lines 8-34. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the proxy service of Redlich and Rai with the outgoing email service of Yeomans. A person of ordinary skill in the art would have been motivated to do this to enable performance improvements.

As per claim 42 Redlich, Rai and Yeoman disclose the configuration adapter of claim 39 wherein selectively providing network services comprises redirecting domain name service requests to a local domain name server for the foreign network (Redlich; column20, lines 21-36).

Claims 12, 26 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redlich US Patent No. 6,591,306 in view of Rai et al. US Patent No. 6,675,208 as applied to claims 1, 2, 5-10, 14-16, 19-24, 28-30, 33-38, and 43-46 above, and further in view of Yeomans et al. US Patent No. 6,134,680 as applied to claims 3, 4, 11, 17, 18, 31, 32, 39, and 42 above and in further view of Flemings et al. US Patent No. 6,128,739.

Redlich, Rai and Yeoman disclose the method, apparatus and configuration adapter of claims 11, 25, and 39 wherein providing an outgoing email service comprises modifying intercepted simple transport protocol (SMTP) packets (Redlich; column 1, lines 16-27; column 5, lines 39-67; column 6, lines 1-27; column 17, lines 39-64; Yeomans column 4, lines 8-34). Redlich, Rai, and Yeomans do not expressly disclose to redirect the intercepted SMTP packets to an SMTP server on the foreign network. Fleming discloses redirecting intercepted packets to an SMTP server on the foreign network. See column 4, lines 17-49. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine intercepting SMTP packets of Redlich, Rai and Yeomans with the redirecting packets of Fleming. A person of ordinary skill in the art would have been motivated to do this to provide a mapping function.

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Claims 13, 27 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redlich US Patent No. 6,591,306 in view of Rai et al. US Patent No. 6,675,208 as applied to claims 1, 2, 5-10, 14-16, 19-24, 28-30, 33-38, and 43-46 above, and further in view of Yeomans et al. US Patent No. 6,134,680 as applied to claims 3, 4, 11, 17, 18, 31, 32, 39, and 42 above and in further view of Waskiewicz US Patent No. 5,822,526.

Redlich, Rai and Yeoman disclose the method, apparatus and configuration adapter of claims 11, 26, and 40 wherein providing an outgoing email service comprises modifying intercepted simple mail transport protocol (SMTP) packets (Redlich; column 1, lines 16-27; column 5, lines 39-67; column 6, lines 1-27; column 17, lines 39-64; Yeomans column 4, lines 8-34). Redlich, Rai, and Yeomans do not expressly disclose to redirect the intercepted SMTP packets to an SMTP server on the foreign network without modifying the source address of the SMTP packet. Waskiewicz discloses redirecting the packets without modifying the source address of the packet. See column 3, lines 54-67; column 4, lines 1-44; column 5, lines 24-35. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine intercepting SMTP packets of Redlich, Rai and Yeomans with the redirecting packets without modifying the source address of Waskiewicz. A person of ordinary skill in the art would have been motivated to do this to compensate for differences from corresponding system formats and conventions (column 4, lines 54-60).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Short et al. U.S. Patent No. 6,130,892 discloses a nomadic router or translator.

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Marchetti et al. U.S. Patent No. 6,619,398 discloses a method for ARP in a wireless system.

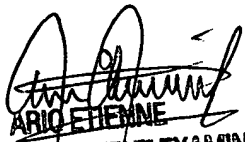
Herzog et al. U.S. Patent No. 6,425,003 discloses method and app for resolving where to forward DNS requests.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (703) 305-8420. The examiner can normally be reached on Monday-Tuesday 11:30am-8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703) 308 - 7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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